Owner's Manual

CRAFTSMAN®

3.5 HORSEPOWER 20" SIDE DISCHARGE ROTARY LAWN MOWER

Model No. **917.387205**

- Safety
- Assembly
- Operation
- Maintenance
- Español
- Repair Parts



CAUTION:

Read and follow all Safety Rules and Instructions before operating this equipment

Sears, Roebuck and Co., Hoffman Estates, IL 60179 Visit our Craftsman website: www.sears.com/craftsman

TABLE OF CONTENTS

Warranty	2	Product Specifications	9
Safety Rules	2	Service and Adjustments	11
Assembly	4	Storage	12
Operation	5	Troubleshooting	13
Maintenance Schedule	8	Repair Parts	30
Maintenance	8	Parts Ordering	Back Cover

WARRANTY

LIMITED ONE YEAR WARRANTY ON CRAFTSMAN POWER MOWER

For one year from date of purchase, when this Craftsman Lawn Mower is maintained, lubricated, and tuned up according to the operating and maintenance instructions in the owner's manual, Sears will repair free of charge any defect in material or workmanship. If this Craftsman Lawn Mower is used for commercial or rental purposes, this warranty applies for only 90 days from the date of purchase.

This Warranty does not cover:

- Expendable items which become worn during normal use, such as rotary mower blades, blade adapters, belts, air cleaners and spark plug.
- Repairs necessary because of operator abuse or negligence, including bent crankshafts and the failure to maintain the equipment according to the instructions contained in the owner's manual.

Warranty service is available by returning the Craftsman power mower to the nearest Sears Service Center/Department in the United States. This warranty applies only while this product is in use in the United States.

This Warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

SEARS, ROEBUCK AND CO., D/817 WA, HOFFMAN ESTATES, ILLINOIS 60179

SAFETY RULES

Safety standards require operator presence controls to minimize the risk of injury. Your unit is equipped with such controls. Do not attempt to defeat the function of the operator presence controls under any circumstances.

TRAINING:

- Read this operator's manual carefully. Become familiar with the controls and know how to operate your mower properly. Learn how to quickly stop mower.
- Do not allow children to use your mower.
 Never allow adults to use mower without proper instructions.
- Keep the area of operation clear of all persons, especially small children and pets.
- Use mower only as the manufacturer intended and as described in this manual.

- Do not operate mower if it has been dropped or damaged in any manner.
 Always have damage repaired before using your mower.
- Do not use accessory attachments that are not recommended by the manufacturer. Use of such attachments may be hazardous.
- The blade turns when the engine is running.

PREPARATION:

- Always thoroughly check the area to be mowed and clear it of all stones, sticks, wires, bones, and other foreign objects.
 These objects will be thrown by the blade and can cause severe injury.
- Always wear safety glasses or eye shields when starting and while using your mower.

- Dress properly. Do not operate mower when barefoot or wearing open sandals.
 Wear only solid shoes with good traction when mowing.
- Check fuel tank before starting engine.
 Do not fill gas tank indoors, when the
 engine is running or when the engine is
 hot. Allow the engine to cool for several
 minutes before filling the gas tank. Clean
 off any spilled gasoline before starting the
 engine.
- Always make wheel height adjustments before starting your mower. Never attempt to do this while the engine is running.
- Mow only in daylight or good artificial light.

OPERATION:

- Keep your eyes and mind on your mower and the area being cut. Do not let other interests distract you.
- Do not mow wet or slippery grass. Never run while operating your mower. Always be sure of your footing — keep a firm hold on the handles and walk.
- Do not put hands or feet near or under rotating parts. Keep clear of the discharge opening at all times.
- Always stop the engine whenever you leave or are not using your mower, or before crossing driveways, walks, roads, and any gravel—covered areas.
- Never direct discharge of material toward bystanders nor allow anyone near the mower while you are operating it.
- Before cleaning, inspecting, or repairing your mower, stop the engine and make absolutely sure the blade and all moving parts have stopped. Then disconnect the spark plug wire and keep it away from the spark plug to prevent accidental starting.
- Do not continue to run your mower if you hit a foreign object. Follow the procedure outlined above, then repair any damage before restarting and operating you mower.
- Do not change the governor settings or overspeed the engine. Engine damage or personal injury may result.
- Do not operate your mower if it vibrates abnormally. Excessive vibration is an indication of damage; stop the engine, safely check for the cause of vibration and repair as required.
- Do not run the engine indoors. Exhaust fumes are dangerous.

- Never cut grass by pulling the mower towards you. Mow across the face of slopes, never up and down or you might lose your footing. Do not mow excessively steep slopes. Use caution when operating the mower on uneven terrain or when changing directions — maintain good footing.
- Never operate your mower without proper guards, plates, grass catcher or other safety devices in place.

MAINTENANCE AND STORAGE:

- Check the blade and the engine mounting bolts often to be sure they are tightened properly.
- Check all bolts, nuts and screws at frequent intervals for proper tightness to be sure mower is in safe working condition.
- Keep all safety devices in place and working.
- To reduce fire hazard, keep the engine free of grass, leaves or excessive grease and oil.
- Check grass catcher often for deterioration and wear and replace worn bags.
 Use only replacement bags that are recommended by and comply with specifications of the manufacturer of your mower.
- Always keep a sharp blade on your mower.
- Allow engine to cool before storing in any enclosure.
- Never store mower with fuel in the tank inside a building where fumes may reach an open flame or an ignition source such as a hot water heater, space heater, clothes dryer, etc.

▲CAUTION: Always disconnect spark plug wire and place wire where it cannot contact spark plug in order to prevent accidental starting when setting up, transporting, adjusting or making repairs.

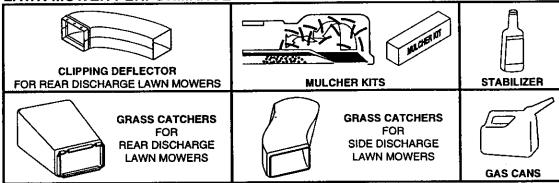
WARNING

The engine exhaust from this product contains chemicals known to the State of California to cause cancer, birth defects, or other reproductive harm.

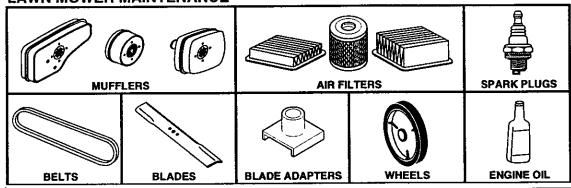
ACCESSORIES

These accessories were available when this lawn mower was produced. They are also available at most Sears retail outlets and service centers. Most Sears stores can also order repair parts for you, when you provide the model number of your lawn mower. Some of these accessories may not apply to your lawn mower.

LAWN MOWER PERFORMANCE



LAWN MOWER MAINTENANCE



ASSEMBLY

Read these instructions and this manual in its entirety before you attempt to assemble or operate your new lawn mower. Your new lawn mower has been assembled at the factory with the exception of those parts left unassembled for shipping purposes. All parts such as nuts, washers, bolts, etc., necessary to complete the assembly have been placed in the parts bag. To ensure safe and proper operation of your lawn mower, all parts and hardware you assemble must be tightened securely. Use the correct tools as necessary to ensure proper tightness.

TO REMOVE LAWN MOWER FROM CARTON

- Remove loose parts included with mower.
- Cut down two end comers of carton and lay end panel down flat.
- Remove all packing materials except padding between upper and lower handle and padding holding operator presence control bar to upper handle.

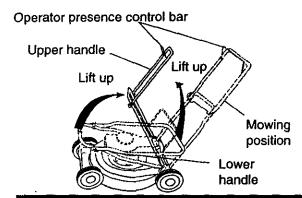
 Roll lawn mower out of carton and check carton thorougly for additional loose parts.

HOW TO SET UP YOUR LAWN MOWER

TO UNFOLD HANDLE

IMPORTANT: Unfold handle carefully so as not to pinch or damage control cables.

- Raise handles until lower handle section locks into place in mowing position.
- Remove protective padding, raise upper handle section into place on lower handle and tighten both handle knobs.
- Remove handle padding holding operator presence control bar to upper handle.
- Your lawn mower handle can be adjusted for your mowing comfort. Refer to "Adjust Handle" in the Service and Adjustment section of this manual.



OPERATION

KNOW YOUR LAWN MOWER

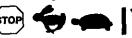
READ THIS OWNER'S MANUAL AND SAFETY RULES BEFORE OPERATING YOUR LAWN MOWER. Compare the illustrations with your lawn mower to familiarize yourself with the location of various controls and adjustments. Save this manual for future reference.

These symbols may appear on your lawn mower or in literature supplied with the product. Learn and understand their meaning.

















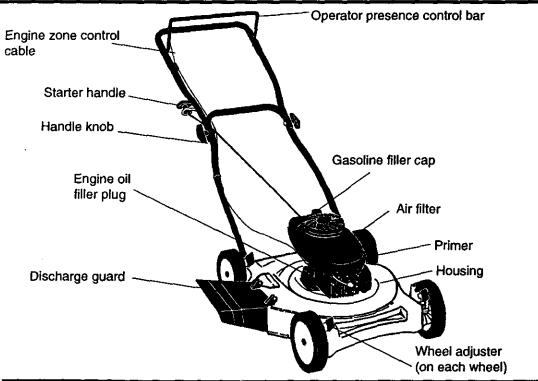
CAUTION OR WARNING

ENGINE

ENGINE OFF

CHOKE

OIL DANGER, KEEP HANDS AND FEET AWAY



MEETS CPSC SAFETY REQUIREMENTS

Sears rotary walk-behind power lawn mowers conform to the safety standards of the American National Standards Institute and the U.S. Consumer Product Safety Commision. The blade turns when the engine is running.

)perator presence control bar - must be ield down to the handle to start the engine. Release to stop the engine.

Primer - pumps additional fuel from the carburetor to the cylinder for use when starting a cold engine.

Starter handle - used for starting the engine.

The operation of any lawn mower can result in foreign objects thrown into the eyes, which can result in severe eye damage. Always wear safety glasses or eye shields while operating your lawn mower or performing any adjustments or repairs. We recommend a wide vision safety mask over spectacles or standard safety glasses.

HOW TO USE YOUR LAWN MOWER ENGINE SPEED

The engine speed was set at the factory for optimum performance. Speed is not adjustable.

ENGINE ZONE CONTROL

▲CAUTION: Federal regulations require an engine control to be installed on this lawn mower in order to minimize the risk of blade contact injury. Do not under any circumstances attempt to defeat the function of the operator control. The blade turns when the engine is running.

 Your lawn mower is equipped with an operator presence control bar which requires the operator to be positioned behind the lawn mower handle to start and operate the lawn mower.

TO ADJUST CUTTING HEIGHT

- Raise wheels for low cut and lower wheels for high cut.
- Adjust cutting height to suit your requirements. Medium position is best for most lawns.
- To change cutting height, squeeze adjuster lever toward wheel. Move wheel up or down to suit your requirements. Be sure all wheels are in the same setting.

NOTE: Adjuster is property positioned when plate tab inserts into hole in lever. Also, 9-position adjusters (if so equipped) allow lever to be positioned between the plate tabs.

Raise wheels for low cut





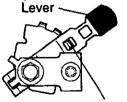


Plate tab

BEFORE STARTING ENGINE

Your lawn mower is shipped without oil in the engine.

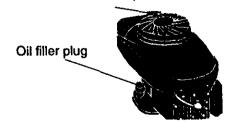
- Be sure mower is level and area around oil fill is clean.
- Remove engine oil cap and fill to the full line on the dipstick.
- Use 20 ozs. of oil. For type and grade of oil to use, see "ENGINE" in Maintenance section of this manual.
- · Pour oil slowly. Do not over fill.
- Check oil level before each use. Add oil if needed. Fill to full line on dipstick.
- To read proper level, tighten engine oil cap each time.
- · Reinstall engine oil cap and tighten.
- Change the oil after every 25 hours of operation or each season. You may need to change the oil more often under dusty, dirty conditions.

GAS

 Fill fuel tank. Use fresh, clean, regular unleaded gasoline with a minimum of 87 octane. Do not mix oil with gasoline.
 Purchase fuel in quantities that can be used within 30 days to assure fuel freshness.

WARNING: Experience indicates that alcohol blended fuels (called gasohol or using ethanol or methanol) can attract moisture which leads to separation and formation of acids during storage. Acidic gas can damage the fuel system of an engine while in storage. To avoid engine problems, the fuel system should be emptied before storage of 30 days or longer. Drain the fuel tank, start the engine and let it run until fuel lines and carburetor are empty. Use fresh fuel next season. See Storage Instructions for additional information. Never use engine or carburetor cleaner products in fuel tank or permanent damage may occur.

Gasoline filler cap



TO START ENGINE

- To start a cold engine, push primer five (5) times before trying to start. Use a firm push. This step is not usually necessary when starting an engine which has already run for a few minutes.
- Hold operator presence control bar down to the handle and pull starter handle quickly. DO NOT allow starter rope to snap back.
- To STOP engine, release operator presence control bar.

NOTE: In cooler weather it may be necessary to repeat priming steps. In warmer weather over priming may cause flooding and engine will not start. If you do flood engine wait a few minutes before attempting to start and DO NOT repeat priming steps.

MOWING TIPS

- Under certain conditions, such as very tall grass, it may be necessary to raise the height of cut to reduce pushing effort and to keep from overloading the engine and leaving clumps of grass clippings. It may also be necessary to reduce ground speed and/or run the lawn mower over the area a second time.
- For extremely heavy cutting, reduce the width of cut by overlapping previously cut path and mow slowly.
- For better grass bagging and most cutting conditions, the engine speed should be set in the fast position.
- For side discharge lawn mowers, cutting in a counter-clockwise direction, starting at the outside of the area to be cut, spreads grass clippings more evenly and puts less load on the engine. To keep clippings off of walkways, flower beds, etc., make the first cuts in a clockwise direction.
- Pores in cloth grass catchers can become filled with dirt and dust with use and catchers will collect less grass. To prevent this, regularly hose catcher off with water and let dry before using.
- Keep top of engine around starter clear and clean of grass clippings and chaff.
 This will help engine air flow and extend engine life.

MAINTENANCE

	MAINTENANCE SCHEDU FILL IN DATES AS YOU COMPLETE REGULAR SERVICE	JLE	a Erof	E EAC	HUSE ISE EACH 10 H EVERT EVER	OURS N25 HO REVERY REVERY	JAS SON	ORAGE ERVIC	E DAT	ES
	Check for Loose Fasteners	1				~				
ı	Clean/Inspect Grass Catcher (If Equipped)	1	/	•		1				
lм	Clean Lawn Mower		1			1				
0	Clean Under Drive Cover (Power-Propelled Mowers)			~						
E	Check drive belt/pulleys (Power-Propelled Mowers)				V					
R	Check/Sharpen/Replace Blade				V 3					
	Lubrication Chart				/ _	/				
	Clean Battery/Recharge (Electric Start Mowers)				V	V4				
E	Check Engine Oil Level	V								
N	Change Engine Oil				1,2					
G	Clean Air Filter				1 2					
1	Inspect Muffler		<u> </u>		V					
N	Clean or Replace Spark Plug	<u> </u>								
E	Replace Air Filter Paper Cartridge	1			√ 2		1]]		ļ

- 1 Change more often when operating under a heavy load or in high ambient temperatures.
- 2 Service more often when operating in dirty or dusty conditions.
- 3 Replace blades more often when mowing in sandy soil.
- 4 Charge 48 hours at end of season.

GENERAL RECOMMENDATIONS

The warranty on this lawn mower does not cover items that have been subjected to operator abuse or negligence. To receive full value from the warranty, operator must maintain mower as instructed in this manual.

Some adjustments will need to be made periodically to properly maintain your unit. All adjustments in the Service and Adjustments section of this manual should be checked at least once each season.

- Once a year, replace the spark plug, clean or replace air filter element and check blade for wear. A new spark plug and clean/new air filter element assures proper air-fuel mixture and helps your engine run better and last longer.
- Follow the maintenance schedule in this manual.

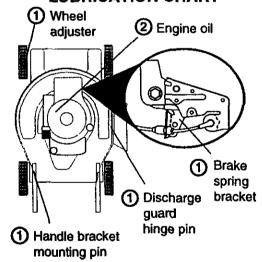
BEFORE EACH USE

- · Check engine oil level.
- · Check for loose fasteners.

LUBRICATION

Keep unit well lubricated (See "LUBRICA-TION CHART"). •

LUBRICATION CHART



- Spray lubricant
- Refer to MAINTENANCE "ENGINE" section.

IMPORTANT: Do not oil or grease plastic wheel bearings. Viscous lubricants will attract dust and dirt that will shorten the life of the self-lubricating bearings. If you feel they must be lubricated, use only a dry, powered graphite type lubricant sparingly.

PRODUCT SPECIFICATIONS

MODEL NUMBER	917.387205					
SERIAL NUMBER						
DATE OF PURCHASE						
HORSEPOWER:	3.5					
DISPLACEMENT:	9.05CU. IN.					
GASOLINE CAPACITY/ TYPE:	1.25 QUARTS					
	UNLEADED REGULAR					
OIL TYPE (API-SF/SG/SH):	SAE 30 (ABOVE 32°F)					
	SAE 5W-30 (BELOW 32°F)					
OIL CAPACITY:	20 OZS.					
SPARK PLUG(GAP: .030")	CHAMPION RJ19LM OR J19LM					
VALVE CLEARANCE:	INTAKE: .004008					
	EXHAUST: .004008					
SOLID STATE IGNITION						
AIR GAP:	.0125 IN.					
BLADE BOLT TORQUE:	35-40 FT. LBS.					
The model and serial numbers will be found on a decal attached to the rear of the lawn mower housing. Record both serial number and date of purchase in space						

LAWN MOWER

provided above.

Always observe safety rules when performing any maintenance.

TIRES

- Keep tires free of gasoline, oil, or insect control chemicals which can harm rubber.
- Avoid stumps, stones, deep ruts, sharp objects and other hazards that may cause tire damage.

BLADE CARE

For best results, mower blade must be kept sharp. Replace bent or damaged blades.

TO REMOVE BLADE

- Disconnect spark plug wire from spark plug and place wire where it cannot come in contact with spark plug.
- Turn lawn mower on its side. Make sure air filter and carburetor are up.
- Use a wood block between blade and mower housing to prevent blade from turning when removing blade bolt.
- Protect your hands with gloves and/or wrap blade with heavy cloth.
- Remove blade bolt by turning counterclockwise.

 Remove blade and attaching hardware (bolt, lock washer and hardened washer).

NOTE: Remove the blade adapter and check the key inside hub of blade adapter. The key must be in good condition to work properly. Replace adapter if damaged.

TO REPLACE BLADE

- Position the blade adapter on the engine crankshaft. Be sure key in adapter and crankshaft keyway are aligned.
- Position blade on the blade adapter aligning the two (2) holes in the blade with the raised lugs on the adapter.
- Be sure the trailing edge of blade (opposite sharp edge) is up toward the engine.
- Install the blade bolt with the lock washer and hardened washer into blade adapter and crankshaft.
- Use block of wood between blade and lawn mower housing and tighten the blade bolt, turning clockwise.
- The recommended tightening torque is 35-40 ft. lbs.

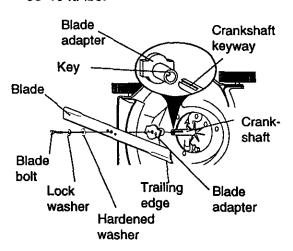
IMPORTANT: Blade bolt is grade 8 9 heat treated.

TO SHARPEN BLADE

NOTE: We do not recommend sharpening blade - but if you do, be sure the blade is balanced.

Care should be taken to keep the blade balanced. An unbalanced blade will cause eventual damage to lawn mower or engine.

- The blade can be sharpened with a file or on a grinding wheel. Do not attempt to sharpen while on the mower.
- To check blade balance, drive a nail into a beam or wall. Leave about one inch of the straight nail exposed. Place center hole of blade over the head of the nail. If blade is balanced, it should remain in a horizontal position. If either end of the blade moves downward, sharpen the heavy end until the blade is balanced.
 The recommended tightening torque is 35-40 ft. lbs.



GRASS CATCHER

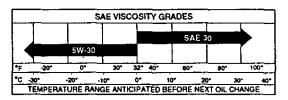
(If purchased as an accesssory)

- The grass catcher may be hosed with water, but must be dry when used.
- Check your grass catcher often for damage or deterioration. Through normal use it will wear. If catcher needs replacing, replace only with a manufacturer approved replacement catcher. Give the lawn mower model number when ordering.

ENGINE

LUBRICATION

Use only high quality detergent oil rated with API service classification SF, SG or SH. Select the oil's SAE viscosity grade according to your expected operating temperature.

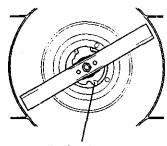


NOTE: Although multi-viscosity oils (5W30, 10W30 etc.) improve starting in cold weather, these multi-viscosity oils will result in increased oil consumption when used above 32°F. Check your engine oil level more frequently to avoid possible engine damage from running low on oil.

Change the oil after every 25 hours of operation or at least once a year if the lawn mower is not used for 25 hours in one year. Check the crankcase oil level before starting the engine and after each five (5) hours of continuous use. Tighten oil plug securely each time you check the oil level.

TO CHANGE ENGINE OIL

- Disconnect spark plug wire from spark plug and place wire where it cannot come in contact with spark plug.
- · Be sure lawn mower is on level surface.
- Oil will drain more freely when warm.
- · Catch oil in a suitable container.
- Remove bottom oil drain plug.
- After oil has drained completely, replace oil drain plug and tighten securely.
- Refill engine with oil. Pour slowly. Do not over fill.
- Fill to top of slot inside of filler hole.
- Reconnect spark plug wire to spark plug.



Drain plug

AIR FILTER

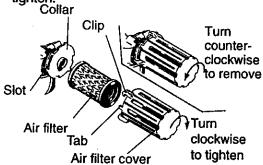
Your engine will not run properly and may be damaged by using a dirty air filter. Replace the air filter every year, more often if you mow in very dusty, dirty conditions. Do not wash air filter.

TO CLEAN AIR FILTER

- Remove the air filter by turning counterclockwise to the stop and pull away from collar.
- Remove filter from inside of cover.
- Clean the inside of the cover and the collar

to remove any dirt accumulation.

- Insert new filter into cover.
- Put air filter cover and filter into collar aligning the tab with the slot.
- Push in on cover and turn clockwise to tighten.



MUFFLER

Inspect and replace corroded muffler as it could create a fire hazard and/or damage. **SPARK PLUG**

Change your spark plug each year to make your engine start easier and run better. Set spark plug gap at .030 inch.

CLEANING

IMPORTANT: For best performance, keep mower housing free of built-up grass and trash. Clean the underside of your mower after each use.

▲CAUTION: Disconnect spark plug wire from spark plug and place wire where it cannot come in contact with the spark plug.

- Turn lawn mower on its side. Make sure air filter and carburetor are up. Clean the underside of your lawn mower by scraping to remove build-up of grass and trash.
- Clean engine often to keep trash from accumulating. A clogged engine runs hotter and shortens engine life.
- Keep finished surfaces and wheels free of all gasoline, oil,etc.
- We do not recommend using a garden hose to clean lawn mower unless the electrical system, muffler, air filter and carburetor are covered to keep water out. Water in engine can result in shortened engine life.

SERVICE AND ADJUSTMENTS

▲CAUTION: BEFORE PERFORMING ANY SERVICE OR ADJUSTMENTS:

- · Release control bar and stop engine..
- Make sure the blade and all moving parts have completely stopped.
- Disconnect spark plug wire from spark plug and place where it cannot come in contact with plug.

LAWN MOWER

TO ADJUST CUTTING HEIGHT

See "TO ADJUST CUTTING HEIGHT" in the Operation section of this manual.

REAR DEFLECTOR

The rear deflector, attached between the rear wheels of your mower, is provided to minimize the possibility that objects will be thrown out of the rear of the mower into the operator mowing position. If the deflector becomes damaged, it should be replaced.

DISCHARGE GUARD

The discharge guard attached to the discharge opening of your lawn mower, is provided to prevent the possibility of injury resulting from objects being thrown out of the discharge opening into the operator mowing position. If the discharge guard becomes damaged, it should be replaced.

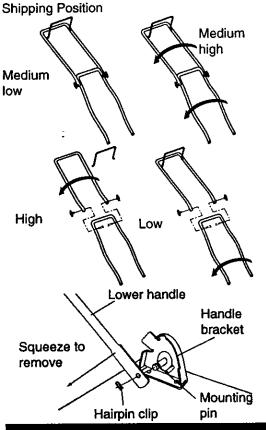
TO ADJUST HANDLE

Your lawn mower handle can be raised or lowered for your mowing comfort. Four

- (4) positions are available: high, medium high, medium low and low. Handles are shipped mounted in the medium low position.
- To change from medium low to medium high position, the upper and lower handle sections will have to be turned over.
- · Remove the cable clips.
- Remove the controls and operator presence control bar from the upper handle.
- Remove the starter rope guide from the upper handle.
- Remove hairpin cotters.
- Disconnect the lower handle from the handle brackets.
- Turn the handle over and reassemble the hairpin cotters that have been removed.
- Reassemble the starter rope guide.
- Reassemble the controls and the operator presence control bar to the upper handle.

ACAUTION: The operator presence control bar must pivot freely to permit blade/ brake engagement when control bar is released. Do not overtighten the fasteners holding the controls to the upper handle.

- To change from medium low to high position only the upper handle section will have to be turned over.
- To change from medium low to low position, only the lower handle section will have to be turned over.



ENGINE

CARBURETOR

Your carburetor has a non-adjustable fixed main jet for mixture control. If your engine does not operate properly due to suspected carburetor problems, take your lawn mower to an authorized service center for repair and adjustment.

IMPORTANT: Never tamper with the engine governor, which is factory set for proper engine speed. Overspeeding the engine above the factory high speed setting can be dangerous. if you think the engine-governed high speed needs adjusting, contact your nearest AUTHO-RIZED service center, which has proper equipment and experience to make any necessary adjustments.

ENGINE SPEED

The engine speed has been factory set. Do not attempt to increase engine speed as it may result in personal injury. If you believe the engine is running too fast or too slow, take your lawn mower to an authorized service center for repair and adjustment.

STORAGE

Immediately prepare your lawn mower for storage at the end of the season or if the unit will not be used for 30 days or more.

LAWN MOWER

When lawn mower is to be stored for a period of time, clean it thoroughly, remove all dirt, grease, leaves, etc. Store in a clean, dry area.

- Clean entire lawn mower (See "CLEAN-ING" in the Maintenance section of this manual).
- Lubricate as shown in the Maintenance section of this manual.
- Be sure that all nuts, bolts, screws, and pins are securely fastened. Inspect moving parts for damage, breakage and wear. Replace if necessary.
- Touch up all rusted or chipped paint surfaces; sand lightly before painting.

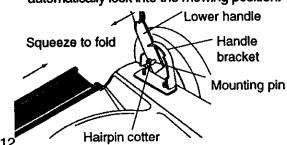
HANDLE

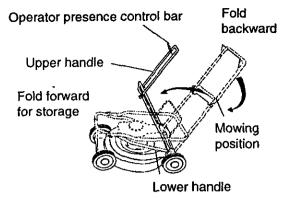
You can fold your lawn mower handle for storage.

- Squeeze the bottom ends of the lower handle toward each other until the lower handle clears the handle bracket, then move handle forward.
- Loosen upper handle mounting bolts enough to allow upper handle to be folded back.

IMPORTANT: When folding the handle for storage or transportation, be sure to fold the handle as shown or you may damage the control cables.

 When setting up your handle from the storage position, the lower handle will automatically lock into the mowing position.





ENGINE FUEL SYSTEM

IMPORTANT: It is important to prevent gum deposits from forming in essential fuel system parts such as carburetor, fuel filter, fuel hose, or tank during storage. Also, experience indicates that alcohol blended fuels (called gasohol or using ethanol or methanol) can attract moisture which leads to separation and formation of acids during storage. Acidic gas can damage the fuel system of an engine while in storage.

- · Drain the fuel tank.
- Start the engine and let it run until the fuel lines and carburetor are empty.
- Never use engine or carburetor cleaner products in the fuel tank or permanent damage may occur.
- · Use fresh fuel next season.

NOTE: Fuel stabilizer is an acceptable alternative in minimizing the formation of fuel gum deposits during storage. Add stabilizer to gasoline in fuel tank or storage container. Always follow the mix ratio found on stabilizer

TROUBLESHOOTING CHART

container. Run engine at least 10 minutes after adding stabilizer to allow the stabilizer to reach the carburetor. Do not drain the gas tank and carburetor if using fuel stabilizer.

ENGINE OIL

Drain oil (with engine warm) and replace with clean engine oil. (See "ENGINE" in the Maintenance section of this manual).

CYLINDER

- Remove spark plug.
- Pour one ounce (29 ml) of oil through spark plug hole into cylinder.
- Pull starter handle slowly a few times to distribute oil.
- Replace with new spark plug.

OTHER

- Do not store gasoline from one season to another.
- Replace your gasoline can if your can starts to rust. Rust and/or dirt in your gasoline will cause problems.
- If possible, store your unit indoors and cover it to give protection from dust and dirt.
- Cover your unit with a suitable protective cover that does not retain moisture. Do not use plastic. Plastic cannot breathe which allows condensation to form and will cause your unit to rust.

IMPORTANT: Never cover mower while engine and exhaust areas are still warm.

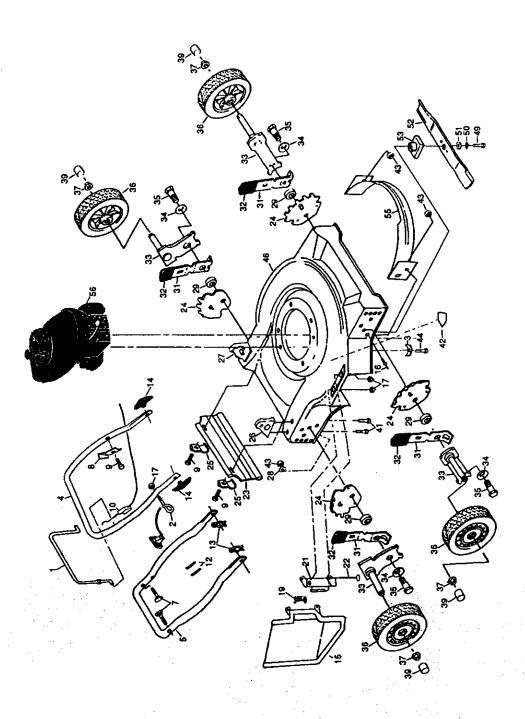
▲CAUTION: Never store the lawn mower with gasoline in the tank inside a building where furnes may reach an open flame or spark. Allow the engine to cool before storing in any enclosure.

PROBLEM	CAUSE	CORRECTION
Does not start	Dirty air filter.	Clean/replace air filter.
	Out of fuel.	• Fill fuel tank.
	Stale fuel.	Drain tank and refill with fresh clean fuel.
	Water in fuel.	Drain fuel tank and carburetor and refill tank with fresh gasoline.
	 Spark plug wire is disconnected. 	Connect wire to plug.
	Bad spark plug.	Replace spark plug.
	 Loose blade or broken blade adapter. 	Tighten blade bolt or replace blade adapter.
	 Control bar in released position. 	Depress control bar to handle.
	Control bar defective.	Replace control bar.

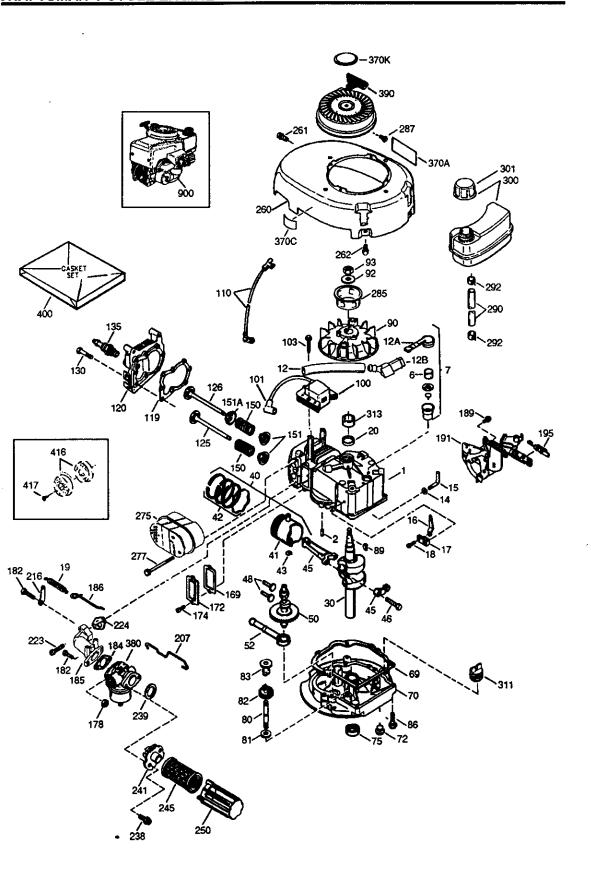
TROUBLESHOOTING CHART

PROBLEM	CAUSE	CORRECTION
Loss of power	Rear of lawn mower housing	Set to "Higher Cut"
	or cutting blade dragging	position.
	in heavy grass.	'
	Cutting too much grass.	Set to "Higher Cut"
		position.
	Dirty air filter.	Clean/replace air filter.
	Buildup of grass, leaves,	Clean underside of mower
	and trash under mower. Too much oil in engine.	housing. • Check oil level.
	Walking speed too fast.	Cut at slower walking
	Training opood too table	speed.
Poor cut – uneven	Wom, bent or loose blade.	Replace blade. Tighten blade bolt.
	Wheel heights uneven.	Set all wheels at same height
	Buildup of grass, leaves	Clean underside of
	and trash under mower.	mower housing.
Excessive	Worn, bent or loose blade.	Replace blade. Tighten
vibration		blade bolt.
	Bent engine crankshaft.	Contact an authorized
		service center.
Starter rope hard	Engine flywheel brake is on	Depress control bar to
to pull	when control bar is released.	upper handle before
	B	pulling starter rope.
	Bent engine crankshaft.	Contact an authorized service center.
	Blade adapter broken.	Replace blade adapter.
	Blade dragging in grass.	Move lawn mower to cut
		grass or to hard surface
		to start engine.
Grass catcher	Cutting height too low.	a Doing gutting beingt
not filling (if so	Cutting height too low. Lift on blade worn off.	Raise cutting height.Replace blade.
equipped)	Catcher not venting air.	Clean grass catcher.
Hard to push	Grass is too high or wheel	Raise cutting height.
	height is too low. • Rear of lawn mower	Raise rear of lawn mower
	housing or blade dragging	housing one (1) setting
<u>:</u>	in grass.	higher.
	Grass catcher too full.	Empty grass catcher.
	Handle height position not	Adjust handle height to
	right for you.	suit.
	<u> </u>	

REPAIR PARTS

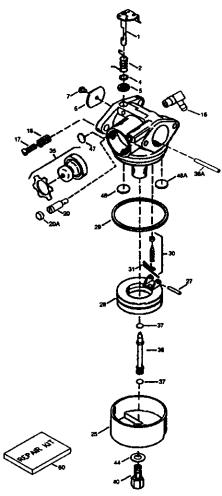


DESCRIPTION	Washer		Roll	Wheel and Tire Assembly	•		Phread Cutting Screw 5/16-18 x 3/4	ecat	3/8-16	Hex Head Thread Rolling Screw 3/8-16 x 1-1/8	Lawn Mower Housing	Hex Head Screw 3/8-24 x 1-3/8 (Grd. 8)	Helicai Lock Washer 3/8	Washer		pter		Engine (See Breakdown) Craftsman	3.993512	fanual	Warning Decal (Not Shown)		lawn mower:	cher	2.5 gal,)	lizer	SAE 30W Oil (20 oz.)		ver
DESCI	Belleville Washer		Shoulder Boll	Wheel an	ž	Hubcap	Thread Co	Danger Decal	Locknut 3/8-16	Hex Head	Lawn Mov	Hex Head	Helical Lo	Hardened Washer	Blade 20*	Blade Adapter	Front Baffle	Engine (S	Model 143.993512	Owner's Manual	Warning D		of included with	Grass Catcher	Gas Can (2.5 gal.)	Fuel Stabi	SAE 30W	Dust Shield	Mower Cover
PART NO.	62335	07107	142/48	700263	83923	800090	149741	85463	751592	150406	163928	851084	850263	851074	850972	850977	700839X479			168861	161058		Available accessories not included with lawn mower.	71 33077	71 33623	71 33500	71 33300	71 33417	71 33316
KE NO Y	8		ဂ္ဂ	36	37	33	41	42	43	44	46	49	22	5	25	23	22	26		:	;		Availabl	;	:	:	;	;	;
DESCRIPTION	Control Bar		Rope Guide	Engine Washer	Upper Handle	Lower Handle	Handle Bolt 5/16-18 x 1-3/4	Up-Stop Bracket	Hex Washer Head Screw #10-24 x 1/2	Engine Zone Control Cable	Wire Tie	Hairpin Cotter	STD. Knobs	Discharge Guard	Rivet	Locknut 1/4-20	Torsion Spring	Hinge Deflector	Hinge Rod	Rear Deflector	Wheel Adjusting Bracket	Deflector Bracket	Handle Bracket Assembly (Right)	Handle Bracket Assembly (Left)	Washer	Spacer	Selector Spring	Selector Knob	Axle Arm Assembly
PART NO.	явалэ	2000	153638	851201X004	165451X479	157081X479	131959	850733X004	750097	153892	66426	51793	136376	752052	128415	63601	851855	88602	150215	140543	750085X007	87584X004	151665X479	151667X479	61537	146630	700331X004	87877	145935X004
KE NO.	•	- 1	N	ന	4	· IC	^	. α	0	2		<u>6</u>	4	5	9	1	6			•	24	22	56	57		50		35	

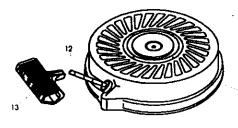


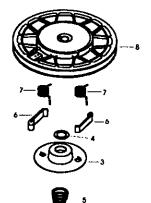
KEV	DADT		VEV	DADT	
KEY NO.	PART NO.	DESCRIPTION	KEY	PART	PECOPIPTION
140.	NO.	DESCRIPTION	NO.	NO.	DESCRIPTION
1	37280	Cylinder (Incl. 2,20 &	119	37028	* Cylinder Head Cocket
•	0,200	150)	120	36825	* Cylinder Head Gasket Cylinder Head
2	26727	Dowel Pin	125	37288	Exhaust Valve (Std.)
6	33734	Breather Element			(Incl. 151)
7	36557	Breather Ass'y. (Incl. 6 &	126	37289	Intake Valve (Std.) (Incl.
4.5		12A)			151)
12	36775	Breather Tube	130	6021A	Screw, 5/16-18 x 1-1/2"
12A	36558	Breather Cover & Tube	135	35395	Resistor Spark Plug
12B	36694	(Incl. 12B) Breather Tube Elbow	+50	04070	(RJ19LM)
14	28277	Washer	150 151	31672 31673	Valve Spring
15	30589	Governor Rod (Incl. 14)	151A	40017	Valve Spring Cap Intake Valve Seal
16	34839A	Governor Lever	169	36783	* Valve Cover Gasket
17	31335	Governor Lever Clamp	172	36784	Valve Cover
18	651018	Screw, Torx T-15, 8-32 x	174	30200	Screw, 10-24 x 9/16"
4.0		19/64"	178	29752	Nut & Lock Washer, 1/4-
19	36281	Extension Spring			28
20 30	32600	Oil Seal	182	6201	Screw, 1/4-28 x 7/8"
40	36793 35544A	Crankshaft	184	26756	* Carburetor To Intake
40	33344A	Piston, Pin & Ring Set (Std.)	185	26705	Pipe Gasket
	35545A	Piston, Pin & Ring Set	186	36785 32653	Intake Pipe
		(.010" OS)	189	650839	Governor Link Screw, 1/4-20 x 3/8"
	35546	Piston, Pin & Ring Set	191	36559A	S.E. Brake Bracket (Incl.
		(.020" OS)			195)
41	35541	Piston & Pin Ass'y. (Std.)	195	610973	Terminal
	55546	(Incl. 43)	207	34336	Throttle Link
	35542	Piston & Pin Ass'y. (.010"	216	33086	R.P.M. Adjusting Lever
	35543	OS) (Incl. 43)	223	650451	Screw, 1/4-20 x 1"
	33343	Piston & Pin Ass'y, (.020" OS) (Incl. 43)	224 238	36786 650932	* Intake Pipe Gasket
42	35547A	Ring Set (Std.)	239	34338	Screw, 10-32 x 49/64" * Air Cleaner Gasket
_	35548A	Ring Set (.010" OS)	241	35797	Air Cleaner Gasket Air Cleaner Collar
	35549	Ring Set (.020 OS)	245	35066	Air Cleaner Filter
43	20381	Piston Pin Retaining	250	35065	Air Cleaner Cover
		Ring	260	36834	Blower Housing
45	36777	Connecting Rod Ass'y.	261	30200	Screw, 10-24 x 9/16"
46	32610A	(Incl. 46)	262	650831	Screw, 1/4-20 x 1/2"
48	27241	Connecting Rod Bolt Valve Lifter	275 277	36790A	Muffler
50	37032	Camshaft (NCR)	285	650988 35000A	Screw, 1/4-20 x 2-5/16* Starter Cup
52	29914	Oil Pump Ass'y.	287	650926	Screw, 8-32 x 21/64"
69	35261	* Mounting Flange Gasket	290	34357	Fuel Line
70	32612C	Mounting Flange (Incl.	292	26460	Fuel Line Clamp
		72 thru 83)	300	35586	Fuel Tank (Incl. 292 &
72	36083	Oil Drain Plug			301)
75 80	27897 30574A	Oil Seal	301	36246	Fuel Cap
81	30590A	Governor Shaft Washer	311	27625	Oil Fill Plug
82	30591	Governor Gear Ass'y.	313 370A	34080 36261	Spacer Bassi
		(Incl. 81)	370C	37199	Lubrication Decal Primer Decal
83	30588A	Governor Spool	370K	36695	Starter Decal
86	650488	Screw, 1/4-20 x 1-1/4"	380	640174	Carburetor (Incl. 184)
89	611004	Flywheel Key	390	590737	Rewind Starter
90	611112	Flywheel	400	37029A	Gasket Set (Incl. Items
92	650815	Belleville Washer			Marked *)
93 100	650816 34443B	Flywheel Nut	416	36085	Spark Arrestor Kit (Incl.
101	610118	Solid State Ignition Spark Plug Cover	447	650004	417)(Optional)
103	651007	Screw, Torx T-15, 10-24	417	650821	Screw, 10-32 x 1/2"
		x 15/16"	900		(Optional) Replacement Engine
110	37047	Ground Wire	300		750830, order from 71-
		-			999
			900		Replacement Short Block
					75 0 829A,
					order from 71-999
					RPM High 2900 to 3200

NOTE: All component dimensions given in U.S. inches 1 inch = 25.4 mm

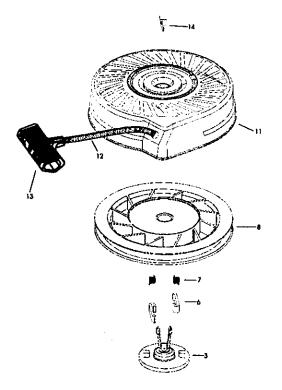


		•
KEY NO.		DESCRIPTION
	640174	Carburetor (Incl. 184 of Engine Parts List)
1	631615	Throttle Shaft & Lever Assembly
2	631767	Throttle Return Spring
4	631184	* Dust Seal Washer
5	631183	* Dust Seal (Throttle)
6	640070	Throttle Shutter
7	650506	* Shutter Screw
16	631807	Fuel Fitting
17	651025	Throttle Crack Screw/Idle Speed Screw
18	630766	Tension Spring
20	640018	Idle Restrictor Screw
20A	640053	Idle Restrictor Screw Cap
25		Float Bowl
27	631024	* Float Shaft
28	632019	Float
29	631028	* Float Bowl "O" Ring
30	631021	* Inlet Needle, Seat, & Clip (Incl. 31)
31	631022	Spring Clip
35	36045A	Primer Bulb/Retainer Ring
36	640080	Main Nozzle Tube
36A		Carburetor Tube
37	632547	* "O" Ring, Main Nozzle Tube
40	640175	High Speed Bowl Nut
	27110A	Bowl Nut Washer
47	630748	* Welch Plug, Idle Mixture Well
	631027	* Welch Plug, Atmospheric Vent
48A	631027	* Welch Plug
60	632760	Repair kit (Incl. Items Marked *)
		0.4





KEY NO.	PART NO.	DESCRIPTION
	590694	Recoil Starter
1	590599A	Spring Pin (Incl. 4)
2	590600	Washer
3	590696	Retainer
4	590601	Washer
5	590697	Brake Spring
6	590698	Starter Dog
7	590699	Dog Spring
8	590700	Pulley & Rewind Spring Ass'v.
11	590695	Starter Housing Ass'y. (40 degree grommet)
12	590535	Starter Rope (98" X 9/ 64" dia.)
13	590701	Starter Handle



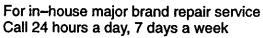
NO.	DESCRIPTION
590737	Rewind Starter
590740	Retainer
590616	Starter Dog
590617	Dog Spring
590618A	Pulley & Rewind Spring Ass'v
590687A	Starter Housing Ass'y (40 degree grommet)
590535	Starter Rope (Length 98" x 9/64" dia.)
590701	Starter Handle
590760	Spring Clip
	590737 590740 590616 590617 590618A 590687A 590535

KEY PART

For the repair or replacement parts you need delivered directly to your home Call 7 am - 7 pm, 7 days a week

1-800-366-PART

(1-800-366-7278) Para ordenar piezas con entrega a domicilio - 1-800-659-7084



1-800-4-REPAIR

(1-800-473-7274)

Para pedir servicio de reparación a domicilio - 1-800-676-5811



For information on purchasing a Sears Maintenance Agreement or to inquire about an existing Agreement Call 9 am - 5 pm, Monday-Saturday

1-800-827-6655

When requesting service or ordering parts, always provide the following information:

- Product Type
 Part Number
- Model Number
 Part Description











America's Repair Specialists

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